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New species and records of African and Lemurian *Oedichirus* ERICHSON (Staphylinidae, Paederinae, Procirrina)

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A b s t r a c t : The material listed below was studied in the context of a projected article on material from several parts of the world collected in the field by the author in the last five decades, and some undescribed species found in the collections of the Geneva museum. As a large number of new species later found in other collections began to make such a project unwieldy, it was decided to present the material in separate papers according to geographical region. The present paper covers material from Africa, Arabia and Madagascar in the Geneva museum and the author's collection.

The female ninth abdominal sternite and vulvar plate, a diagnostic feature first described by HERMAN (2012) are illustrated in this paper. General considerations on the genus and diagnostic characters are discussed in a paper devoted to the oriental species (ROUGEMONT. in preparation).

K e y w o r d s : Staphylinidae, *Oedichirus*, new species, new records, Africa, Yemen, Madagascar.

Acronyms of depositories:

CRO ..... Rougemont collection, Oxford
CSB ..... Schülke collection, Berlin
MHNG ..... Geneva Natural History Museum

Afro-tropical species

Oedichirus altitudinis nov.sp. (Figs 1)

♂ Holotype: ETHIOPIA, Dinshu, Bale prov., VI.1971, G. de Rougemont ♀ HOLOTYPE *Oedichirus altitudinis* des. 2015 G. de Rougemont [CRO]; ♀ paratype: ETHIOPIA, Bale 25 km S. of Dinshu, Worgona Tullu, 3800 m, XI.1971, at roots of *Alchemilla* ♀ PARATYPE Oedichirus altitudinis des. 2015 G. de Rougemont [CRO]; 1♀ paratype: ETHIOPIA, Bale reg., Bale Mts. N.P., Harenna Forest, Katcha area, 2400 m, 24.viii.1998, G. Cuccodoro & G. Eme, #10d, veg. deb. on branches of tall tree ♀ PARATYPE Oedichirus altitudinis des. 2015 G. de Rougemont [MHNG]; 1♀ paratype: ETHIOPIA, Bale reg., Bale Mts. N.P., 2 km S of Finchaya Habera, 3450 m, 16.viii.1998, leg. G. Cuccodoro & G. Eme, decay. leav. + stems Knifofias ♀ PARATYPE Oedichirus altitudinis des. 2015 G. de Rougemont [MHNG].

D e s c r i p t i o n : Length: 6.8-7.5 mm; length of fore-body: 2.5; length of head: 0.85; breadth of head: 0.95; length of antenna: 1.7; length of pronotum: 1.1; breadth of pronotum: 1; length of elytron: 0.75; breadth of elytra: 1. Head and prothorax dark reddish-

brown, elytra and abdomen pitchy, mouthparts, antennae and legs testaceous. Body devoid of microsculpture. Pubescence of fore-body dark, very sparse and very short, semi-erect; pubescence of abdomen short, pale brassy, decumbent. Habitus: Fig. 1.

Head transverse, eyes large, post-ocular area evenly rounded between posterior margin of eye and neck, the post-ocular border entire but not forming a salient temporal angle; surface shiny, devoid of microsculpture, puncturation moderately coarse and sparse, composed of umbilicate and smaller simple punctures. Labrum with four small dark teeth. Third antennomere longer and more slender than second. Pronotum only slightly elongate; lateral line present in the form of a fine sharp carina extending to all but posterior 1♀7th; sculpture consisting of a pair of discal series of 4 large punctures each in basal half, a cluster of 8-9 large punctures in front of these, and some other punctures of varying size laterad. Micropterous, elytra narrower than pronotum, humeral angles obsolete; punctures sparse, shallow, the broad interstices with a slightly wrinkled appearance. Punctures of abdominal tergites disposed randomly, fine, not very dense, the interstices on average as large as diameter of punctures.

Male: abdominal sternite VII unmodified; sternite VIII: Fig. 1s8, the surface with a very large, fairly deep impression bordered anteriorly by a sharp ridge, without spines or combs; aedoeagus: Fig. 1 arl, 1 av, 1.05 mm long, the ventral sclerite bearing a large curved anterior process.

Female: vulvar plate: Fig. 1vp

In section II (species with lateral line of pronotum present only anteriorly) of FAGEL's key to the African *Oedichirus* (1970), *O. altitudinis* nov.sp. runs to *O. elgonensis* FAGEL, from which it differs above all by its quite different male sexual characters.

This flightless species is probably confined to the Bale Mountains range.

Oedichirus camerounensis FAGEL

Oedichirus camerounensis FAGEL 1970: 424.

M a t e r i a l s t u d i e d : 1♀: 16.4.1974 TOGO, Tchebpo, an filev, AFR. OCCID. – S. Vit ♀ Oedichirus camerounensis Fagel det. 2015 G. de Rougemont [MHNG].

This species was only known by the single type from Cameroon.

Oedichirus crocodilus nov.sp. (Figs 2)

♂ Holotype: ETHIOPIA 1974 ROUGEMONT ♀ Kaffa prov., Gibbie R., 175 km W. Addis Abeba ♀ HOLOTYPE Oedichirus crocodilus des. 2014 G. de Rougemont [CRO].

D e s c r i p t i o n : length: 9 mm; length of fore-body: 4; length of head: 0.9; breadth of head: 1.12; length of pronotum: 1.4; breadth of pronotum: 1.1; length of elytron: 1.5; breadth of elytra: 1.32. Head, elytra and abdominal urites VII-IX black, pronotum and urites III-VI red; mouthparts and antennae dark testaceous; legs testaceous, knees broadly infuscate. Dorsal surfaces devoid of microsculpture except on abdominal tergites VII-VIII. Pubescence long, pale erect. Habitus: Fig. 2.

Head moderately transverse; eyes large; post-ocular carina and groove well developed, extending to posterior margin of eye, not forming an angle; puncturation of disc consisting of a pair of small frontal punctures, a few others near antennal tubercles, a group of larger punctures on vertex comprising a pair of arcuate series of four punctures enclosing

two punctures, some small ocular punctures, an arcuate row of four punctures near base, and small punctures in the post-ocular grooves. Pronotum strongly elongate, the sides slightly concavely retracted to base; lateral margins not bordered; disc with a pair of series of five punctures each preceded by a cluster of a dozen smaller punctures, series of two large lateral punctures, and the usual small punctures along anterior and lateral margins. Fully winged, elytra ample, with well marked humeral angles, the sides a little dilated from humeral angles to 1♀3rd the distance from posterior margin; puncturation as coarse as discal series of pronotum, and dense, the interstices everywhere narrower than diameter of punctures. Punctures of abdominal tergites arranged in three discrete rows of punctures behind anterior rows of short keels.

Male: abdominal sternite VII unmodified; sternite VIII: Fig. 2s8, the left half of apical emargination with a large comb of long spines; aedoeagus: Figs 2 al, 2av.

O. crocodilus nov.sp. is similar and close to *O. zumpti* BERNHAUER from Cameroon from which it differs by the puncturation of the head and pronotum: in *O. zumpti* the paired semi-circular series of punctures on the head are composed of five punctures each and enclose a single median puncture (4 and 2 punctures respectively in *O. crocodilus*); in *O. zumpti* the discal series of the pronotum are composed of 6 large equally spaced punctures behind a cluster of a dozen smaller punctures, whereas in *O. crocodilus* there are only 6 anterior punctures and the series are of 5 punctures, the anterior puncture of the series being more distant from the next than the length of intervals between the four others. The aedoeagi of the two species are also similar, but the ventral processes are slightly different (cf. Figs 801, 802 in FAGEL 1970).

Oedichirus ivoriensis nov.sp. (Figs 3)

♂ Holotype: Côte d'Ivoire, Man Mt. Tonkoui, 900 m. 9.III.77, I. Löbl ♀ Oedichirius [sic] spec. det. M. Uhlig 1982 ♀ HOLOTYPE Oedichirus ivoriensis des. 2015 G. de Rougemont [MHNG].

D e s c r i p t i o n : length: 7.6 mm; length of fore-body: 2.8; length of head: 0.9; breadth of head: 0.92; length of antenna: 1.8; length of pronotum: 1.24; breadth of pronotum: 0.9; length of elytron: 9.2; breadth of elytra: 1.2. Head and neck black; pronotum red, the middle of anterior margin narrowly black; elytra black; abdominal segments III-VI red, the anterior transverse depressions of each tergite progressively less broadly infuscate, segments VII-IX black; antennae brown; palpi testaceous; legs testaceous, the knees and posterior tibiae lightly infuscate. Body devoid of microsculpture, Pubescence long, pale, erect. Habitus: Fig. 3.

Head scarcely transverse; eyes large and protruberent, twice as long as temples, the latter retracted to neck almost in straight lines but with a triangular temporal angle just behind eyes formed by a protrusion of the temporal border; puncturation coarse and dense in anterior 2♀3rds, leaving an impunctate area before a posterior transverse row of smaller punctures. Third antennomere longer than second. Pronotum widest at anterior 1♀3rd, the sides strongly retracted in straight lines thereafter; lateral line bordered only very briefly behind anterior angles where the border is surmounted by series of four close small punctures; sculpture of disc consisting of a pair of series of 8 large punctures each extending almost to anterior margin, and other smaller punctures on the sides.

Micropterous, elytra short, transverse, humeral angles obsolete; posterior margins of elytra bordered; puncturation coarse, interstices smaller than diameter of punctures anteriorly and on disc, sparse in postero-lateral areas where interstices are larger than punc-

tures. Puncturation of abdominal tergites arranged in transverse rows; vestiture sparse, consisting of long erect and shorter semi-recumbent fine pale setae.

Male: abdominal sternite VII unmodified; sternite VIII: Fig. 3s8, the modification asymmetrical, with a raised blade-like keel extending from the fundus of emargination to the right apical tooth; aedoeagus: Figs 3 al, av.

This species does not fit readily in FAGEL's key (1970) next to any similar species; its closest relations are unknown.

***Oedichirus mahnerti* nov.sp. (Figs 4)**

♂ Holotype: KENYA, 9.XI.74, N. de Kisumu, env. 1400 m., Mahnert Perret ♀ HOLOTYPE Oedichirus mahnerti des. 2015 G. de Rougemont [MHNG].

D e s c r i p t i o n : length: 6.6 mm; length of fore-body: 2.75; length of head: 0.7; breadth of head: 0.85; length of antenna: 1.5; length of pronotum: 1.05; breadth of pronotum: 0.82; length of elytron: 1.7; breadth of elytra: 1.1. Head black, pronotum red, abdominal segments III-VI red with centre of tergites infuscate, forming a mid-longitudinal dark band, segments VII-IX entirely black; mouthparts testaceous, last two segments of maxillary palpi somewhat infuscate, antennae and legs testaceous. Dorsal surfaces devoid of microsculpture except on abdominal tergites VII-VIII. Pubescence semi-erect, sparse, short, whitish. Habitus: Fig. 4.

Head moderately transverse; eyes very large; post-ocular border narrow, extending to under posterior margin of eye without forming a discernible angle; lateral margins of frons between anterior angles and eyes bordered by a bead; puncturation sparse, consisting of a pair of widely spaced frontal punctures, two series of three punctures each on vertex with a single puncture between the hindmost two punctures of the series, some small ocular punctures and a pair of punctures near base, besides the small punctures in post-ocular grooves. Pronotum rather short, the sides retracted in almost straight lines from broadly rounded anterior angles to base; lateral margins not bordered; disc with a pair of series of five punctures each preceded by a group of six punctures arranged in a transverse ellipse, two lateral punctures and a number of smaller punctures along anterior and lateral margins. Elytra relatively small and short for an alate species, with prominent humeral angles; puncturation consisting of a series of ten juxta-sutural punctures narrowly separated in posterior half from the irregular and sparse puncturation of rest of disc, the interstices there mostly wider than diameter of punctures. Punctures of abdominal tergites arranged in three discrete transverse rows behind the anterior row of long keels and grooves along anterior margin of each tergite.

Male: abdominal sternites VII and VIII unmodified; aedoeagus: Figs 4al, 4av.

In FAGEL's key (1970) to the African species, section III (pronotum not bordered, punctures of abdomen arranged in transverse rows), the new species runs, notwithstanding the short antennae (dichotomy 6), to *O. abyssinicus* FAGEL, but the tubercles of the humeral angles are less pronounced; it differs moreover from *O. abyssinicus* and the three species that follow in the key by its entirely black elytra without paler posterior margins, and by the shape of the aedoeagus.

Oedichirus melanurus EPPELSHEIM (Figs 5)

Oedichirus melanurus EPPELSHEIM 1885: 138
Oedichirus melanurus FAGEL 1970: 384
Oedichirus melanurus HERMAN 2010: 45

M a t e r i a l s t u d i e d : 1♂: ETHIOPIA, Kaffa, 175 Km W Addis Abeba, Gibbie R., 1971 ♀ under leaves of evergreen bushes on river bank ♀ Oedichirus melanurus Epp. det. 1985 G. de Rougemont [CRO]; 1♂ YEMEN, Jibla, in irrigated field, II.1985, G. de Rougemont ♀ Oedichirus melanurus Epp. det. 1985 G. de Rougemont [CRO]; 2♀♀: YEMEN, Wadi Sharez, on river bank, III.1985, G. de Rougemont ♀ Oedichirus melanurus Epp. det. 1985 G. de Rougemont [CRO]; 1♂: 41 Yemen Arab Republic, Prov. Abyan, 13 09'69"N 45 19'46"E, 50 km ne Aden, Wadi Barra, 7 km nnw Zinjibar, 50 m, 29.IV.1998, leg. A Bischof, J. Bittermann, M. Fibiger, H. Hacker, H. Pecks, H-P. Schreier ♀ Sammlung M. Schülke Berlin [CSB]; 1♀: 42 Yemen Arab Republic, Prov. Hadramaut, 14 47'44"N 49 15'16"E, 25 km nne Mukalla, Al Ain, 25 km nnw Ar Rayyan, 1.V.1998, leg. A. Bischof, J. Bittermann, M. Fibiger, H. Hacker, H. Pecks, H-P. Schreier ♀ Oedichirus cf. melanurus Epp. det. M. Schülke 2010 ♀Sammlung M. Schülke Berlin ♀ Oedichirus melanurus Epp. det. 2015 G. de Rougemont (CSB).

Habitus (of a ♀ from Yemen): Fig. 5h.

Male: sternite VIII: Fig. 5s8; aedoeagus: Fig. 5arl.

Female: sternite IX: Fig. 5vp.

The type of *O. melanurus* is a female from the Cape Verde Islands. The material listed above corresponds to the "undescribed species" from Abyssinia mentioned by FAGEL (1970, p. 386) in his discussion of *O. melanurus*. FAGEL subsequently affixed type labels to these Eritrean[1]* specimens, which remained undescribed; his hesitation to describe a new species was on account of the slightly greater size of the Eritrean specimens and the great distance separating the two localities. The species has since been recorded from other parts of Africa (HERMAN 2010: 45).

D i s t r i b u t i o n : *O. melanurus* is a Sahelian species that has spread widely from the Sahel to other African countries (Tanzania, Namibia etc.). New to Ethiopia and to Arabia.

Oedichirus taitamontis nov.sp. (Figs 6)

♂ Holotype: KENYA, 3.XII.74, Taita Hills 1250 m, env. Wundanyi, Mahnert Perret ♀ HOLOTYPE Oedichirus taitamontis des. 2015 G. de Rougemont [MHNG].

D e s c r i p t i o n : length: 6.3 mm; length of fore-body: 2.2; length of head: 0.82; breadth of head: 1.05; length of pronotum: 1.15; breadth of pronotum: 1; length of ely-

[1] * Note on Ethiopian localities. The locality of Fauvel's specimens of *O. melanurus* from "Abyssinie, Bogos" cited by FAGEL (1970) is in Eritrea, now a separate State. The three species from Ethiopia cited in this paper are recorded as coming from Bale Province and Kaffa province, as those territories were at the time the beetles were collected. Both provinces, together with others (Wollo, part of Hararghe, Arussi (Arsi), Bale, Sidamo, part of Showa (Shewa) and Illubabor) have since been amalgamated into "Oromia Federal Region". The change is annoying for biogeographers; the fourteen old provinces were more self-contained, and corresponded more approximately to distinct biogeographical areas. The new regions were drawn roughly along ethnic lines; Oromia ('land of the Galla, or Oromo people') encompasses a vast irregular area stretching from the Danakil desert in the northeast to the semi-arid lowlands on the Kenyan border, through the high moist mountains of Arussi and Bale, and extends across the Rift Valley through highlands in the west to tropical rainforests and savannah grassland on the edge of the Nile basin.

tron: 0.88; breadth of elytra: 0.95. Body entirely dark brown, mouthparts, antennae and legs uniformly testaceous. Dorsal surfaces devoid of microsculpture except on rows of keels and grooves of anterior margins of abdominal tergites. Pubescence mixed, short and moderately long, pale. Habitus: Fig. 6h.

Head moderately transverse; post-ocular carina prominent, forming a salient dentiform angle removed from posterior margin of eye; puncturation of disc consisting of a dozen small punctures on frons and near post-antennal tubercles, the vertex with an arc of six punctures surrounding a cluster of three punctures arranged in a triangle, the two punctures forming the base of triangle larger than the others, two ocular punctures on each side, an inverted arc of eight punctures stretching from eye to eye, another such inverted arc just before base, and the usual small punctures in post-ocular grooves. Pronotum relatively short; lateral margins entirely bordered by a salient carina which is entirely visible in dorsal view and extends around the anterior angle onto anterior margin; puncturation of disc dense, not forming discernible series, leaving only a few bilaterally symmetrical impunctate areas, one at middle before base, one at the sides, and another near anterior angles. Micropterous, elytra longer than their combined breadth before posterior angles, the humeral angles completely obsolete; puncturation dense and fairly regular on entire surface. Puncturation of abdominal tergites disposed randomly, the punctures coarser than those of elytra.

Male: sternite VII unmodified; sternite VIII: Fig. 6s8; aedoeagus: Fig. 6al.

Owing to its micropteryy and entire pronotal border *O. taitamontis* nov.sp. belongs in section I in FAGEL's 1970 key; because the antennae are missing it cannot be traced after dichotomy 4, but the aedoeagus distinguishes it from all other described species. A notable feature of this new species is the carinate border of the anterior and lateral margins of the pronotum being entirely visible in dorsal view.

Oedichirus villiersi CAMERON

Oedichirus villiersi CAMERON 1953: 519.
Oedichirus Villiersi FAGEL 1970: 407.

M a t e r i a l s t u d i e d : 1♂: YEMEN, Wadi Dhabab, II.1985, G. de Rougemont ♀ Oedichirus villiersi Cam. det. 1985 G. de Rougemont [CRO].

New to Arabia. This is a Sahelian species, known from Senegal, Burkina Faso, Chad and now Yemen.

Lemurian species

Oedichirus analis LECOQ

Oedichirus analis LECOQ, 1986: 81.

M a t e r i a l s t u d i e d : 1♀: E. MADAGASCAR, 70 km E. Antananarivo, 1.IV.2006 [in pile of cut grass on verge of road to Andasibe] G. de Rougemont leg. ♀ Oedichirus analis Er. det. 2006 G. de Rougemont [CRO].

Hitherto known by the single type from an unspecified locality.

***Oedichirus cauvini* nov.sp. (Fig. 7)**

♀ Holotype: NW Madagascar, Marovasa, sifted litter, 7-8.IV.2006, G. de Rougemont leg. ♀ HOLOTYPE Oedichirus cauvini des. 2016 G. de Rougemont; 1♀ paratype: [Ibid.], PARATYPE Oedichirus cauvini des. 2016 G. de Rougemont [both in CRO].

D e s c r i p t i o n : length: 8.8 mm; length of fore-body: 3.2; length of head: 0.85; breadth of head: 0.85; length of antenna: 2; length of pronotum: 1.2; breadth of pronotum: 0.9; length of elytron: 0.85; breadth of elytra: 1. Dorsal surfaces devoid of microsculpture except on abdominal tergite IX. Pubescence medium-short, very sparse, erect, pale. Body rufo-testaceous except abdominal segments VII-VIII black; posterior half of tergite IX rufo-testaceous. Dorsal surfaces devoid of microsculpture. Pubescence of abdomen sparse, short, pale, semi-erect or decumbent. Habitus: Fig. 7.

Head scarcely transverse, elongate when not including eyes; post-ocular border strong, consisting of a punctate groove and carina, the latter forming a tooth at some distance from posterior margin of eye; puncturation of disc sparse, consisting of a few minute setiferous punctures on frons, another on antennal tubercle, a couple of minute ocular punctures, a transverse ellipse of six large punctures on vertex, and a transverse row of small punctures at base of head in addition to the punctures of post-ocular groove. Antennae moderately long, segments II and III sub-equal. Pronotum broader than head, not very long; lateral margins bordered in anterior half; puncturation of disc consisting of a pair of discal series of four punctures each preceded by a transverse row of four punctures, a row of six smaller punctures behind anterior margin, a pair of arcuate lateral series of four punctures, and a transverse row of small punctures before posterior margin. Micropterous, elytra smaller than pronotum, humeral angles completely obsolete; punctures a little finer than those of pronotal discal series, interstices greater than diameter of punctures except in sutural area. Puncturation of abdomen arranged in discrete transverse rows, the first row confused with longitudinal keels and grooves of anterior margins of tergites.

Female: vulvar plate: Fig. 7vp

O. cauvini nov.sp. runs to *O. nodieri* in LECOQ's key to the Malagasy species, from which it differs at first sight by the black 7th and 8th abdominal segments.

Derivation of specific epithet: after Jacky Cauvin, who flew my wife and me to and from the remote type locality in his private aircraft.

***Oedichirus cuccodoroi* nov.sp. (Figs 8)**

♂ Holotype: MADAGASCAR Mt Ambre, 3 km NE N.P. camp site, 12°33'09"S 49°09'40"E, 1300 m, 28.ii.2003, #3a, G. Cuccodoro ♀ HOLOTYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG]; 5 Paratypes: Ibid. ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG, 2 paratypes in CRO]; 5 paratypes: MADAGASCAR Mt Ambre, 2,5 km SE N.P. camp site, 12°31'15"S 49°11'40"E, 950 m, 03.iii.2003 #12a, G. Cuccodoro ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MNHG]; 7 paratypes: MADAGASCAR Mt Ambre, 0,5 km NE N.P. camp site, 12°31'50"S 49°10'35"E, 1000 m, 01.iii.2003 #4a, G. Cuccodoro ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG, 2 paratypes in CRO]; 2 paratypes: MADAGASCAR Mt Ambre, 1,5 km NE N.P. camp site, 12°32'05"S 49°10'40"E, 950 m, 03.iii.2003 #6a, G. Cuccodoro ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG]; 2 paratypes: MADAGASCAR Mt Ambre, 1 km NW N.P. camp site, 12°31'55"S 49°10'32"E, 950 m, 02.iii.2003 #5, G. Cuccodoro ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG]; 5 paratypes: MADAGASCAR Ankarana N.P. near bats cave, 1357'31"S 4907'11"E, 150 m, 09.iii.2003, #11c, G. Cuccodoro ♀ PARATYPE Oedichirus cuccodoroi des. 2015 G. de Rougemont [MHNG].

D e s c r i p t i o n : length: 5.5 mm; length of fore-body: 2.3; length of head: 0.65; breadth of head: 0.75; length of antenna: 1.3; length of pronotum: 0.87; breadth of pronotum: 0.75; length of elytron: 0.64; breadth of elytra: 0.85. Body reddish-brown, the centre of each abdominal tergite more or less and increasingly broadly blackish; mouthparts, antennae and legs testaceous. Head and pronotum densely microsculptate, the surface therefore somewhat matt; elytra with very superficial, scarcely evident microsculpture; transverse depressed area behind anterior margin of each abdominal tergite rugosely microsculptate, dull, the rest of tergites with fine microsculpture consisting of transverse striae. Body almost glabrous, with only a few very sparse short hairs. Habitus: Fig. 8.

Head not strongly transverse; eyes prominent but not very large, temples long, coarctate with base; post-ocular carina fine but distinct, extending anteriad to under posterior margin of eye following curve of temples, without forming any angle; punctures large, dense, not forming any discernible pattern. Pronotum rather short, sides rounded between anterior angles and base; lateral margin entirely bordered by a carina which is visible around the anterior angles in dorsal view; punctures very coarse, arranged in a pair of discal series of 3-4 large punctures preceded by a cluster of six punctures, two lateral punctures and two or three smaller punctures above carina of lateral margin. Micropterous, elytra small, only as broad as pronotum, humeral angles completely obsolete; surface of disc uneven, with large, irregular shallow punctures. Punctuation of abdominal tergites dense, coarse, disposed randomly, all interstices narrower than diameter of punctures.

Male: sternite VIII: Fig. 8s8; aedoeagus: Figs 8arl, av.

Female: vulvar plate: Fig. 8vp.

In LECOQ's key (1986), section I, this species runs to *O. foveicollis* QUEDENFELD, but the aedoeagus, in particular the shape of the anterior process of the ventral plate, is quite different.

Oedichirus electrimontis nov.sp. (Figs 9)

♀ Holotype: Madagaskar, Diego Suarez, Mt. d'Ambre, 28-29 X 95, Heiss ♀ Collection Volker Puthz ♀ Rougemont collection ♀ HOLOTYPE Oedichirus electrimontis des. 2015 G. de Rougemont [CRO].

D e s c r i p t i o n : length: 7.5 mm; length of fore-body: 3.1; length of head: 0.85; breadth of head: 1; length of pronotum: 1.3; breadth of pronotum: 1.07; length of elytron: 0.87; breadth of elytra: 1.07. Body piceous, all appendages uniformly testaceous. Forebody devoid of microsculpture, abdomen entirely microsculptate, the sculpture in the form of transverse striae. Pubescence short, pale, decumbent on elytra and abdomen. Habitus: Fig. 9.

Head only slightly transverse; post-ocular carina salient, ending posteriad in a pronounced dentiform angle removed from posterior margin of eye; puncturation of disc dense, irregular, composed of punctures of varying sizes, not forming discernible patterns. Pronotum rather short, the sides a little rounded to base; lateral margin entirely bordered in the form of a narrow carina mostly visible in dorsal view, and four coarse punctures behind anterior angles; puncturation arranged in a pair of discal series of 6-7 punctures each behind a cluster of 6-7 punctures, lateral series of two punctures, and a

number of punctures near anterior and lateral margins. Microptrous, elytra small, humeral angles completely obsolete; anterior half of lateral margins with around five prominent tubercles, surface of disc very uneven, the puncturation dense. Punctures of abdominal tergites dense, disposed randomly, the interstices narrower than diameter of punctures on anterior tergites, the puncturation progressively sparser on following tergites.

Female: vulvar plate: Fig. 9vp

In LECOQ's key to the *Oedichirus* of Madagascar this species fits near *O. vadoni* LECOQ, from eastern Madagascar from which it differs, according to LECOQ's description, by its darker colour, more densely punctuate head and more numerous punctures of the discal series of the pronotum.

Oedichirus mandibularis LECOQ

Oedichirus mandibularis LECOQ, 1986: 78

M a t e r i a l s t u d i e d : 1♂: E. MADAGASCAR, Andasibe N.P., 900 m, 2.IV.2006, G. de Rougemont leg. ♀ Primary montane rainforest, sifted litter ♀ Oedichirus mandibularis Lecoq J. Janak det. 2014 [CRO].

This tiny (3.1 mm) species was described from east-central Madagascar.

Oedichirus nordicus LECOQ

Oedichirus nordicus LECOQ, 1987: 38

M a t e r i a l s t u d i e d : 1♂ & 3♀♀: MADAGASCAR Mt Ambre, 2,5 km SE N.P. camp site, 12°31'15"S 49°11'40"E, 950 m, 03.iii.2003 #6a, G. Cuccodoro ♀ Oedichirus nordicus Lecoq det. 2016 G. de Rougemont [MHNG, 1 ex. in RCO]

Montagne d'Ambre is the type locality of this species.

Oedichirus vaovao JANAK

Oedichirus vaovao JANAK, 1996: 16

M a t e r i a l s t u d i e d : 2♂♂ & 1♀: C. MADAGASCAR: Anjozorobe, Soa Camp, 1200 m, 10-11.IV.2006, G. de Rougemont leg. ♀ Primary montane rainforest, sifted litter ♀ Oedichirus n. sp. det. 2006 G. de Rougemont ♀ Oedichirus vaovao Janak J. Janak det 2014 [CRO]

This species was described from East Madagascar ("road from Morarano Chrome to Ambakireni"). Soa Camp is a privately owned nature reserve in regenerating primary forest connected to the forests of the eastern escarpment by a corridor in a valley rising to the central plateau.

Oedichirus varius LECOQ

Oedichirus varius LECOQ, 1986: 30

M a t e r i a l s t u d i e d : 1♂: C. MADAGASCAR: Anjozorobe, Soa Camp, 1200 m, 10-11.IV.2006, G. de Rougemont leg. ♀ Primary montane rainforest, leaf litter ♀ Oedichirus sp. det. 2006 det. G. de Rougemont ♀ Oedichirus varius Lecoq J. Janak det. 2014 [CRO].

Only known from central Madagascar.

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Illustrations

h: habitus; arl: aedoeagus in right lateral view; av: aedoeagus in ventral view; s8: male sternite VIII; vp: female sternite IX and vulvar plate.

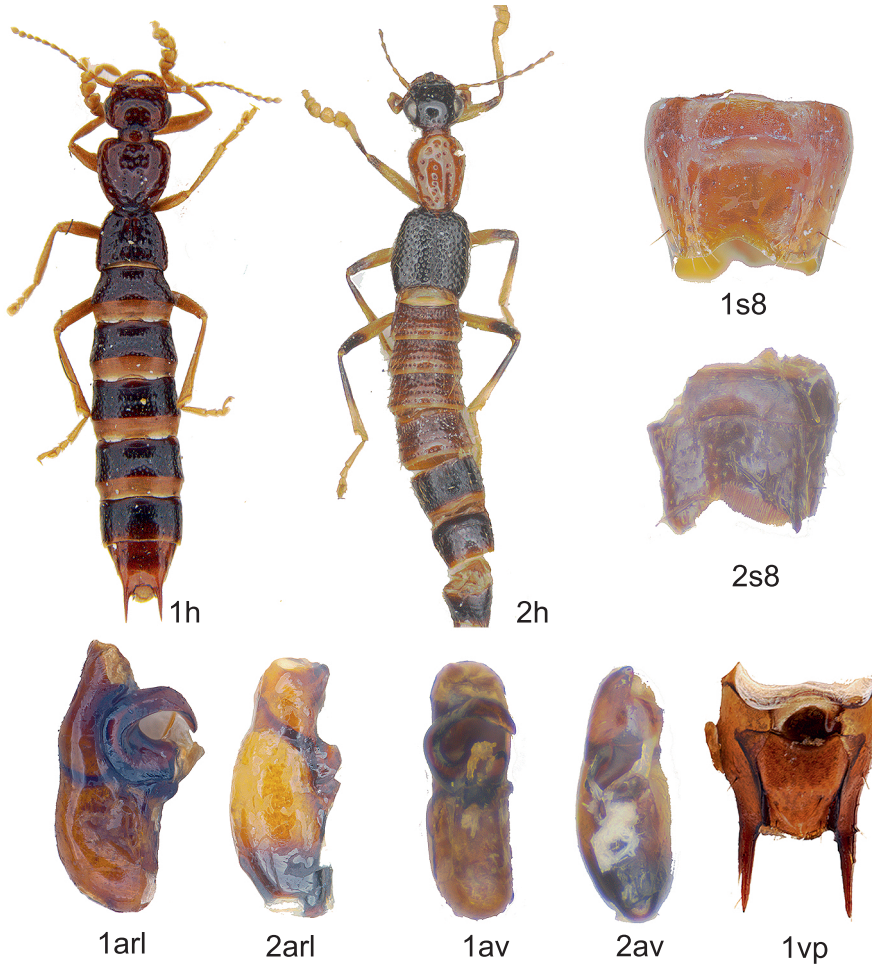

Plate 1: *O. altitudinis* 1h 1arl 1av 1s8 1vp
O. crocodilus 2h 2arl 2av 2s8

3h

4h

3s8

3av

4av

3arl

4arl

Plate 2: *O. ivoriensis* 3h 3arl 3av 3s8
O. mahnerti 4h 4arl 4av

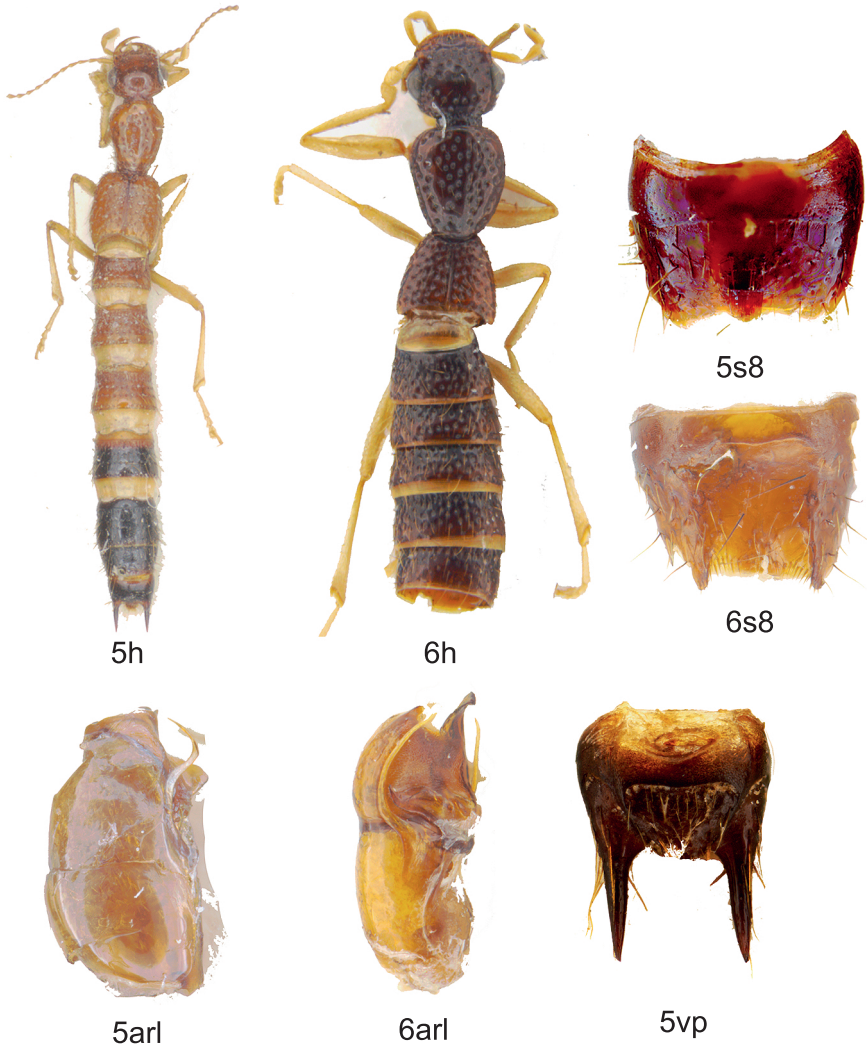

Plate 3: *O. melanurus* 5h 5arl 5s8 5vp
O. taitamontis 6h 6arl 6s8

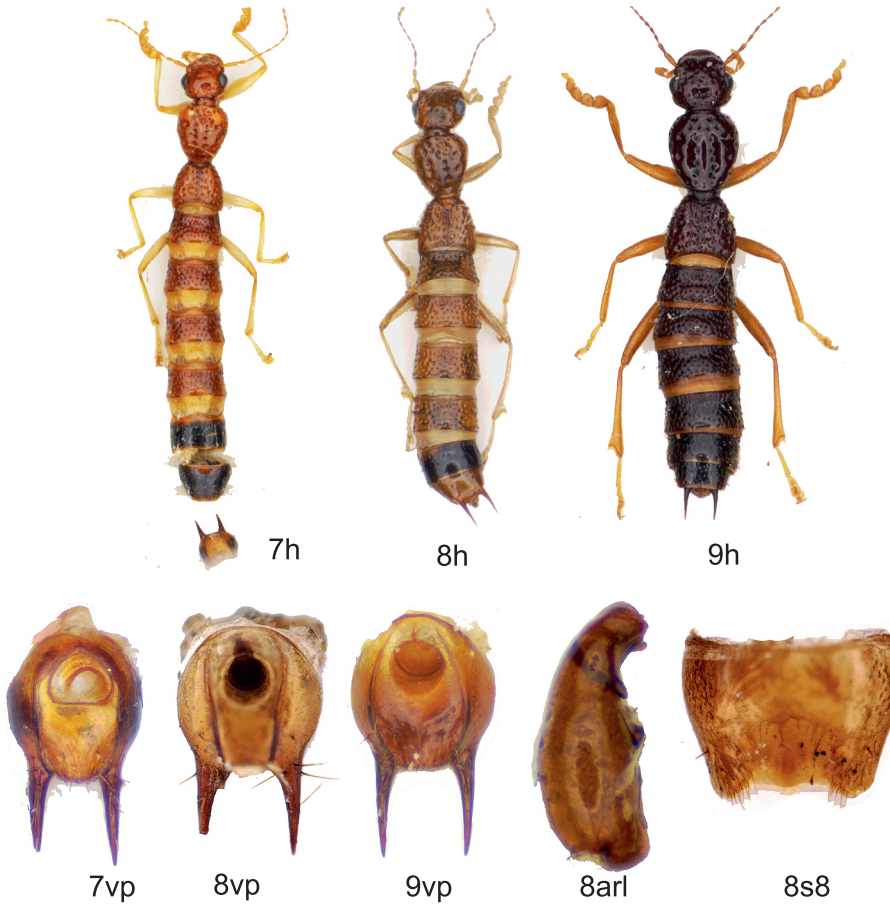

Plate 4:

O. cauvini	7h					7vp
O. cuccodoroi	8h	8arl	8av	8s8		8vp
O. electrimontis	9h					9vp